

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A ~~peptide~~ composition comprising an isolated peptide immobilized on a solid phase, said peptide immunoreactive with ~~having at least one epitope capable of binding antibodies to a native protein comprising the epitope(s),~~

wherein the peptide comprises an amino acid sequence of six to 50 amino acids, and the sequence comprises two Cys residues which are separated from each other by at least ~~about~~ two but fewer than twenty non-Cys amino acid residues and wherein thiol groups of the Cys residues are reversibly protected from oxidation by a chemically reversible means, and

wherein a substantial portion of the composition comprising the immobilized peptide comprises peptide having an intramolecular disulfide bond between the two Cys residues.

2. (Currently amended) The ~~peptide~~ composition of claim 1, wherein the Cys residues of the peptide are protected from oxidation by ethylcarbamoyl, acetamidomethyl, 3-nitro-2-pyridinesulfinyl or diphenyl-4-pyridylmethyl.

3. (Currently amended) The ~~peptide~~ composition of claim 2, wherein the Cys residues of the peptide are protected from oxidation by ethylcarbamoyl.

4. (Currently amended) The ~~peptide~~ composition of claim 1, further comprising a third Cys residue at the N-terminus of the peptide, wherein the third Cys residue ~~which~~ is not protected from oxidation.

5. (Currently amended) The ~~peptide~~ composition of claim 4, wherein the ~~N-terminal amino acids~~ N-terminus sequence of the peptide is comprise Cys-Gly-Gly.

6. (Currently amended) The ~~peptide~~ composition of claim 4, wherein the ~~C-~~terminus amino acid at the C-terminus of the peptide is amidated.

7. (Currently amended) The ~~peptide~~ composition of claim 1, wherein the Cys residues are separated from each other by ~~about~~ four to six non-Cys residues.

8. (Currently amended) The ~~peptide~~ composition of claim 1 ~~which wherein~~ the peptide is immunoreactive with capable of binding antibodies to a retroviral transmembrane protein.

9. (Currently amended) The ~~peptide~~ composition of claim 8, wherein the retroviral protein is HIV-1 gp41 and the peptide comprises at least seven contiguous amino acids within the following sequence:

Arg-Ile-Leu-Ala-Val-Glu-Arg-Tyr-Leu-Lys-Asp-Gln-Gln-Leu-Leu-Gly-Ile-Trp-Gly-Cys-Ser-Gly-Lys-Leu-Ile-Cys (SEQ ID NO:1).

10. (Currently amended) The ~~peptide~~ composition of claim 9, wherein the N-terminus of the peptide comprises amino acids added to enhance ~~immunospecific reactivity~~ specific binding of the antibodies to the protein comprising the epitope(s), wherein at least one of said additional amino acids is a third Cys residue not protected from oxidation.

11. (Currently amended) The ~~peptide~~ composition of claim 10, wherein the third Cys residue not protected from oxidation is the N-terminal residue of the peptide.

12. (Currently amended) The ~~peptide~~ composition of claim 11, wherein the N-terminus amino acid sequence of the peptide is Cys-Gly-Gly.

13. (Currently amended) The ~~peptide~~ composition of claim 11, wherein the ~~C-~~terminus amino acid residue at the C-terminus of the peptide is amidated.

14. (Withdrawn) The peptide of claim 8, wherein the retroviral protein is HIV-2 gp36 and the peptide comprises at least seven contiguous amino acids within the following sequence:

Arg-Val-Thr-Ala-Ile-Glu-Lys-Tyr-Leu-Gln-Asp-Gln-Ala-Arg-Leu-Asn-Ser-Trp-Gly-Cys-Ala-Phe-Arg-Gln-Val-Cys (SEQ ID NO:2).

15. (Withdrawn) The peptide of claim 14, wherein the N-terminus comprises amino acids added to enhance immunospecific reactivity, wherein at least one of said additional amino acids is a Cys residue not protected from oxidation.

16. (Withdrawn) The peptide of claim 15, wherein the Cys not protected from oxidation is the N-terminal residue.

17. (Withdrawn) The peptide of claim 16, wherein the N-terminus sequence is Cys-Gly-Gly.

18. (Withdrawn) The peptide of claim 16, wherein the C-terminus amino acid is amidated.

19. (Withdrawn) The peptide of claim 8, wherein the retroviral transmembrane protein is HTLV-I gp21 and the peptide comprises at least about seven contiguous amino acids within the following sequence:

Gln-Asn-Arg-Arg-Gly-Leu-Asp-Leu-Leu-Phe-Trp-Glu-Gln-Gly-Gly-Leu-Cys-Lys-Ala-Leu-Gln-Glu-Gln-Cys (SEQ ID NO:4).

20. (Withdrawn) The peptide of claim 19, wherein the N-terminus comprises amino acids added to enhance immunospecific reactivity, wherein at least one of said additional amino acids is a Cys residue not protected from oxidation.

21. (Withdrawn) The peptide of claim 20, wherein the Cys not protected from oxidation is the N-terminal residue.

22. (Withdrawn) The peptide of claim 21, wherein the N-terminus sequence is Cys-Gly-Gly.

23. (Withdrawn) The peptide of claim 21, wherein the C-terminus amino acid is amidated.

24. (Withdrawn) The peptide of claim 8, wherein the retroviral protein is HTLV-II gp21 and the peptide comprises at least seven contiguous amino acids within the following sequence:

Gln-Asn-Arg-Arg-Gly-Leu-Asp-Leu-Leu-Phe-Trp-Glu-Gln-Gly-Gly-Leu-Cys-Lys-Ala-Ile-Gln-Glu-Gln-Cys (SEQ ID NO:5).

25. (Withdrawn) The peptide of claim 24, wherein the N-terminus comprises amino acids added to enhance immunospecific reactivity, wherein at least one of said additional amino acids is a Cys residue not protected from oxidation.

26. (Withdrawn) The peptide of claim 25, wherein the Cys not protected from oxidation is the N-terminal residue.

27. (Withdrawn) The peptide of claim 26, wherein the N-terminus sequence is Cys-Gly-Gly.

28. (Withdrawn) The peptide of claim 26, wherein the C-terminus amino acid is amidated.

29.- 47. (Canceled)